



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,051	12/16/2004	Jean-Pierre Bonicel	Q-85367	3502
23373	7590	08/29/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CONNELLY CUSHWA, MICHELLE R	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/518,051

Applicant(s)

BONICEL ET AL.

Examiner

Michelle R. Connelly-Cushwa

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's Amendment filed June 8, 2006 has been fully considered and entered.

The indicated allowability of claims 24-31 is withdrawn in view of reference(s) to Horska (US 5,542,020) and Hulak (US 3,512,611). Rejections based on the newly cited reference(s) follow.

Response to Arguments

Applicant's arguments with respect to claims 14-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 22; the claim recites "an inner peripheral layer and an outer peripheral layer" in lines 2-3 of the claim, and "a peripheral layer" in line 9 of the claim. The claim is unclear because it is impossible to determine whether the peripheral layer in line 9 of the claim is the inner peripheral layer or the outer peripheral layer.

Regarding claim 23; "according to claim 21" should be changed to –according to claim 22—to provide proper antecedent basis for the system of claim 23.

Regarding claims 24-31; the claims inherently contain the deficiencies of any base or intervening claims from which they depend.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 16, 17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Horska (US 5,542,020).

Regarding claim 14; Horska discloses a method for producing an optical transmission cable (10, 10'; see Figures 3 and 4), the cable comprising:

- at least one tube (16, 16');
- a plurality of optical fibers (20, 20') arranged inside the tube;
- a central strengthening member (14, 14'); and
- peripheral strengthening members (17);
- wherein the at least one tube (16, 16') is twisted about the central strengthening member (14, 14');
- wherein the method comprises using a tubular machine (see column 14, lines 44-51) so as to form a peripheral layer around the central strengthening member (see Figures 3 and 4); and

- wherein the peripheral strengthening members (17) and the at least one tube (16, 16') have diameters sufficiently close to each other to ensure that the peripheral layer is homogenous.

Regarding claim 16; the optical transmission cable (10, 10') is an aerial cable (see column 7, lines 19-33).

Regarding claim 17; the cable (10, 10') may be a ground cable (i.e. buried; see column 7, lines 33-35).

Regarding claim 22; Horska discloses that a system (tubular strander; see column 14, lines 44-51) is used to form the cable. Furthermore, the cable of Horska includes an inner peripheral layer and an outer peripheral layer (see Figure 4), wherein the outer peripheral layer is twisted about the inner peripheral layer.

Claim 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hulak (US 3,512,611).

Regarding claim 18; Hulak discloses a tubular machine (1; see the Figure) having:

- a plurality of reels (spools, 2) located inside the tubular machine (1);
- a greasing tank (8); and
- a guiding device (7);
- wherein a strengthening member unwinding from a reel (2) closest to the greasing tank (8) passes through the greasing tank before exiting at an end face of the tubular machine (1).

Regarding claim 19; the reel closest to the greasing tank is designed to receive any wire member of a cable, including a central reinforcing member.

Regarding claims 20 and 21; all of the reels (2) are the same size and the tubular machine (1) has a constant diameter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horska (US 5,542,020) in view of Hulak (US 3,512,611).

Regarding claims 15 and 23; Horska does not explicitly state that:

- the central strengthening member is first unwound from a reel located in the tubular machine,
- then passes through a greasing tank also situated in the tubular machine, and
- then exits at an end of the tubular machine.

Horska, however, teach that tubular stranders are known to one of ordinary skill in the art (see column 14, lines 44-51).

Hulak discloses a tubular strander (1) in which a wire is:

- first unwound from a reel (spool, 2) located in the tubular machine,

- then passed through a greasing tank (8) also situated in the tubular machine, and
- then exits at an end of the tubular machine (see the Figure).

The tubular strander of Hulak includes:

- a plurality of reels (2) located inside the tubular machine;
- a greasing tank (8); and
- a guiding device (7);
- wherein a strengthening member unwinding from a reel (2) closest to the greasing tank (8) passes through the greasing tank before exiting at an end face of the tubular machine (1).

One of ordinary skill in the art would have found it obvious to use a known tubular strander to form the cable of Horska, as explicitly suggested by Horska, and would therefore have found it obvious to use the known tubular strander of Hulak to form the cable of Horska.

Regarding claims 24 and 25; the proposed combination of references teaches all of the claimed limitations, except for explicitly teaching that two peripheral layers are provided/obtained using two separate tubular machines arranged one after the other, however, one of ordinary skill in the art would have found it obvious to use two separate tubular stranders arranged one after the other to form multiple layers for one cable, as tubular stranders used separately or together are well established in the art, and it would have been apparent to one of ordinary skill in the art that additional layers could be formed with serially connected stranders.

Regarding claims 26 and 27; the proposed combination of references teaches all of the claimed limitations, except for explicitly teaching that two peripheral layers are provided/obtained using a tubular machine in a first step and a planetary machine in a second step, however, Horska does disclose that planetary machines may be used (see column 14, lines 44-51), and one of ordinary skill in the art would find it obvious to form a first peripheral layer with a tubular strander and a second peripheral layer with a planetary strander, as both tubular stranders and planetary stranders used together or separately are well established in the art, and it would have been apparent to one of ordinary skill in the art that additionally layers could be formed with serially connected stranders.

Regarding claims 28-31; one of ordinary skill in the art would have found it obvious to have two consecutive stranding machines rotate in opposite directions when forming two peripheral layers on a cable in order to provide a stronger, better formed cable, as it is known in the art to form cables such that consecutive layers have an opposing twist for this purpose.

Conclusion

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone

Art Unit: 2874

number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

Michelle R. Connelly-Cushwa
Michelle R. Connelly-Cushwa
Patent Examiner
August 22, 2006